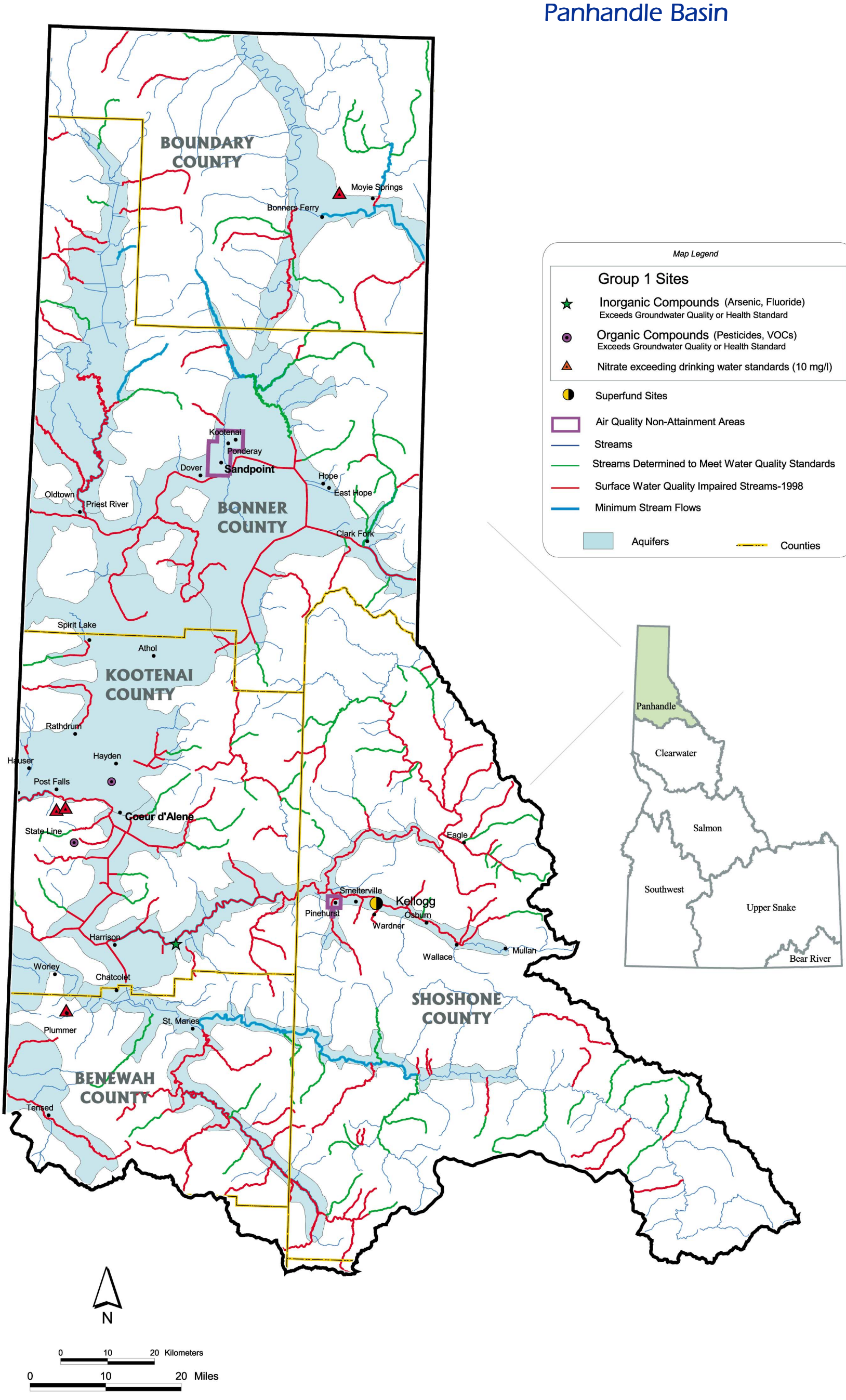
Panhandle Basin



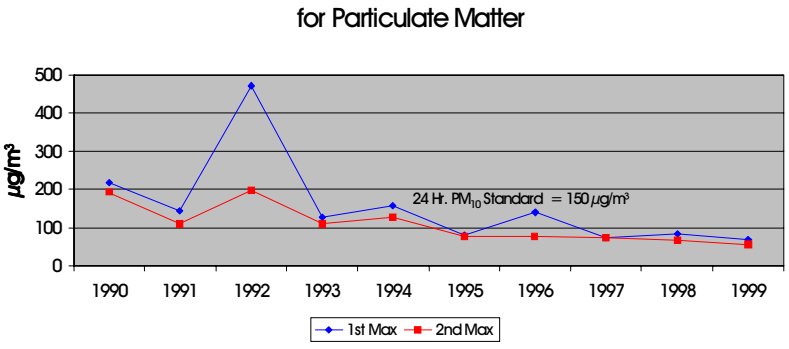
Panhandle

The Panhandle Basin is known for its large lakes — Priest, Pend Oreille, and Coeur d'Alene — as well as numerous smaller lakes. As a result, surface waters are utilized as drinking water sources more than in any other region of the State. The Rathdrum Prairie Aquifer underlies a portion of the basin and is the source of drinking water for over 400,000 people in the region. The Panhandle is heavily forested and the principle industries are timber, mining, and recreation. This basin is drained by the Spokane, Pend Oreille, and Kootenai Rivers.

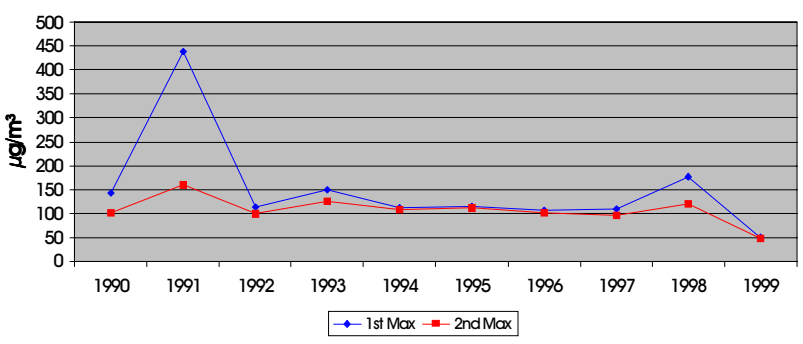
Air Quality

The Panhandle Air Quality Control Region of North Idaho has three recognized airsheds: the Pend Oreille, Rathdrum Prairie, and Silver Valley. Across the region, the main pollutant of concern is particulate matter. State and federal particulate matter health-based standards have been exceeded at monitoring sites in each of these airsheds during the past fifteen years. These exceedances have triggered federal planning requirements to ensure future compliance with the standards. Wildfires and prescribed fires for agricultural and wild land management contribute to particulate matter pollution. In the Silver Valley, lead is also still a concern from old mine wastes; and in Rathdrum Prairie, carbon monoxide and ozone from transportation sources on both sides of the Idaho-Washington border are a concern. The air quality graphs below show the highest and second highest maximum daily readings of particulate matter from annual monitoring.

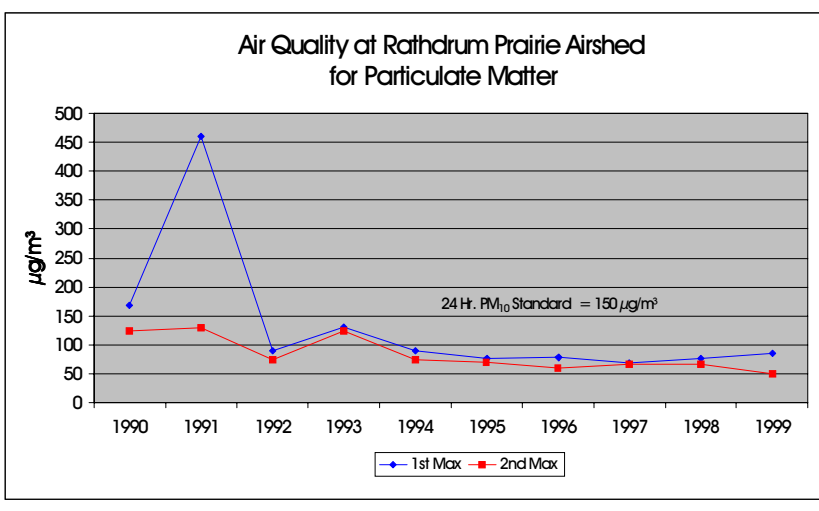
Air Quality at Pend Oreille Airshed
for Particulate Matter



Air Quality at Silver Valley Airshed
for Particulate Matter



Air Quality at Rathdrum Prairie Airshed
for Particulate Matter



Significant Areas of Contamination

The Bunker Hill site is located in the drainage of the Coeur d'Alene River. Cleanup activities have centered on a 21-square-mile inactive industrial mining and smelting area, which includes the communities of Kellogg, Pinehurst, Page, Wardner, and Smelterville. Historic discharges of waste from the mining activities in the area spread metals contamination including cadmium, lead, and zinc throughout the Coeur d'Alene River Basin and downstream to the Spokane River System.

Ground Water

Seven Group 1 Sites of concern have been identified in the Panhandle Basin. (See the "Panhandle Basin" map for locations. See "Definition of Impacted Ground Water Areas and Sites" on page 4 for explanation of these sites.). These sites consist of ground water sampling points that show values greater than the maximum contaminant level for nitrates, organic compounds, or inorganic compounds. (See the "Panhandle Basin" map for locations.)

Ground Water Pollutants of Concern
Panhandle Basin

- Volatile Organic Compounds
  - Perchloroethylene
- Organics
  - Pesticides
- Nitrates
- Semi-volatile Organic Compounds
  - Pentachlorophenol
- Bunker Hill / Inorganics
  - Lead
  - Zinc
  - Cadmium

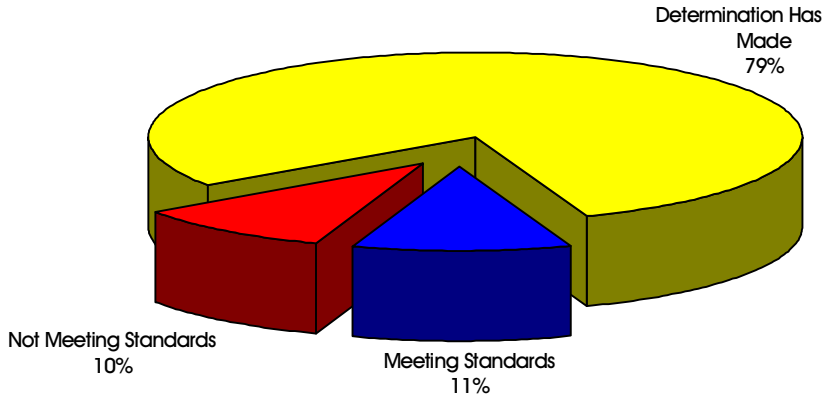
Surface Water

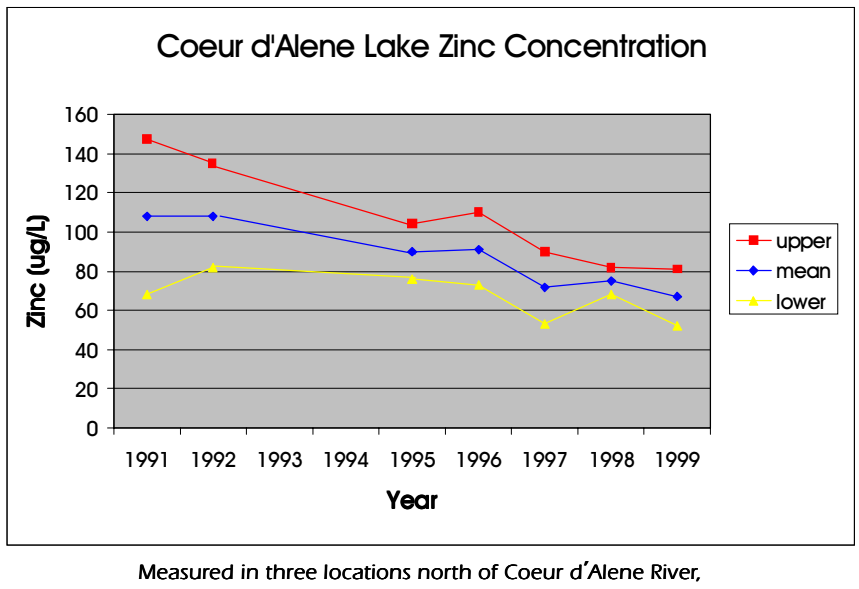
The Panhandle has 8,871 miles of rivers and streams. Approximately 1,856 miles of surface waters have been assessed for water quality in the Panhandle, and 904 of those miles do not meet Idaho water quality standards. The pie chart below shows the percentage of streams meeting water quality standards, the percentage of those not meeting the standards, and the percentage of streams where no specific determination has been made. The South Fork Coeur d'Alene River and its tributaries have elevated metals contamination, which includes cadmium, lead, and zinc. (See the graph below for zinc concentrations.) In addition to metals contamination in the Coeur d'Alene and Spokane River Systems, other water quality impairments of the basin include excessive nutrients, elevated water temperature, and sediment.

Surface Water Pollutants of Concern
Panhandle Basin

- Sediments
- Nutrients
- Temperature
- Metals

Panhandle Basin
281 Monitoring Sites





Measured in three locations north of Coeur d'Alene River, average value for each year, the upper bound of one standard deviation and the lower bound of one standard deviation.